Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-43 (canceled).

44(new). A stabilized, substantially supercoiled plasmid DNA formulation which comprises:

a) a buffered solution containing a buffer and purified, substantially supercoiled plasmid DNA whereby metal ions have been optionally removed;

b) at least one metal ion chelator at a concentration from about 0.5 μM to about 1000 μM; and,

c) a non-reducing scavenging agent at a weight to volume concentration up to about 3%.

45(new). The plasmid DNA formulation of claim 44 wherein the metal ion chelator is selected from the group consisting of EDTA, DTPA, NTA, inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate and combinations thereof.

46(new). A stabilized, substantially supercoiled plasmid DNA formulation which comprises:

a) a buffered solution containing a buffer and purified, substantially supercoiled plasmid DNA whereby metal ions have been optionally removed;

b) at least one metal ion chelator at a concentration from about 0.5 μM to about 1000 μM, wherein the metal ion chelator is selected from the group consisting of EDTA, DTPA, NTA, inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate and combinations thereof; and,

c) a non-reducing scavenging agent at a weight to volume concentration up to about 3%.

47(new). The plasmid DNA formulation of claim 46 wherein the non-reducing scavenging agent is selected from the group consisting of ethyl alcohol, glycerol, methionine, dimethyl sulfoxide, and combinations thereof.

48(new). A stabilized, substantially supercoiled plasmid DNA formulation which comprises:

a) a buffered solution containing a buffer and purified, substantially supercoiled plasmid DNA whereby metal ions have been optionally removed;

b) at least one metal ion chelator at a concentration from about 0.5 μM to about 1000 μM, wherein the metal ion chelator is selected from the group consisting of EDTA, DTPA, NTA, inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate and combinations thereof; and,

c) a non-reducing scavenging agent at a weight to volume concentration up to about 3%, wherein the non-reducing scavenging agent is selected from the group consisting of ethyl alcohol, glycerol, methionine, dimethyl sulfoxide, and combinations thereof.

49(new). The plasmid DNA formulation of claim 48 wherein the buffer is selected from the group consisting of Tris-HCl, glycine, sodium phosphate, potassium phosphate, lithium phosphate, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate, sodium bicarbonate, potassium bicarbonate, lithium bicarbonate and combinations thereof.

50(new). The formulation of claim 49 which further contains a salt.

51(new). The formulation of claim 50 wherein the additional salt is selected from the group consisting of NaCl, KCl, LiCl and combinations thereof, in a range from about 50 mM to about 300 mM.

52(new). A stabilized, substantially supercoiled plasmid DNA formulation which comprises:

a) purified plasmid DNA whereby metal ions have been optionally removed;

b) at least one metal ion chelator selected from the group consisting of EDTA, DTPA, NTA, inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate and combinations thereof, at a concentration from about 0.5 μM to about 1000 μM;

c) at least one non-reducing scavenging agent selected from the group consisting of ethyl alcohol, glycerol, methionine, dimethyl sulfoxide, and combinations thereof, at a weight to volume concentration up to about 3%;

d) a buffer in the pH range from about 7.0 to about 9.5; wherein the buffer is selected from the group consisting of Tris-HCl, glycine, sodium phosphate, potassium phosphate, lithium phosphate, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate, sodium bicarbonate, potassium bicarbonate, lithium bicarbonate and combinations thereof, at a concentration from about 0.5 mM to about 50mM; and,

e) a salt selected from the group consisting of NaCl, KCl, LiCl and combinations thereof at a concentration from about 50mM to about 300 mM.

53(new). A stabilized, substantially supercoiled plasmid DNA formulation which comprises:

(a) purified plasmid DNA whereby metal ions have been optionally removed;

(b) Tris-HCl buffer at a pH from about 7.0 to about 9.5;

(c) ethanol up to about 3% w/v;

(d) EDTA in a concentration range up to about 5 mM; and,

(e) NaCl at a concentration from about 50 mM to about 300 mM.

54(new). A stabilized DNA formulation of claim 53 wherein the NaCl concentration is from about 100 mM to 200 mM.

55(new). A stabilized DNA formulation of claim 53 wherein EDTA is present at a concentration up to about 500 μM.

56(new). A stabilized DNA formulation of claim 53 wherein ethanol is present at a concentration up to about 2%.

57(new). A stabilized DNA formulation of claim 53 wherein EDTA is present at a concentration up to about 500 μM.

58(new). A stabilized DNA formulation of claim 53 wherein ethanol is present at a concentration up to about 2%.

59(new). A stabilized, substantially supercoiled plasmid DNA formulation of claim 44 which comprises placing the plasmid DNA formulation in a second formulation containing an amorphous sugar, and lyophilizing the solution.

60(new). The DNA formulation of claim 59 wherein the plasmid DNA encodes a viral or bacterial antigen DNA is selected from the group consisting of influenza virus DNA, hepatitis A virus DNA, hepatitis B virus DNA, hepatitis C virus DNA, human papillomavirus DNA, DNA from *Mycobacterium tuberculosis*, human immunodeficiency virus DNA, varicella zoster virus DNA, herpes virus DNA, measles virus DNA, rotavirus DNA, mumps virus DNA, rubella virus DNA and combinations thereof.

61(new). A stabilized, substantially supercoiled plasmid DNA formulation of claim 46 which comprises placing the plasmid DNA formulation in a second formulation containing an amorphous sugar, and lyophilizing the solution.

62(new). The DNA formulation of claim 61 wherein the plasmid DNA encodes a viral or bacterial antigen DNA is selected from the group consisting of influenza virus DNA, hepatitis A virus DNA, hepatitis B virus DNA, hepatitis C virus DNA, human papillomavirus DNA, DNA from *Mycobacterium tuberculosis*, human immunodeficiency virus DNA, varicella zoster virus DNA, herpes virus DNA, measles virus DNA, rotavirus DNA, mumps virus DNA, rubella virus DNA and combinations thereof.

63(new). A stabilized, substantially supercoiled plasmid DNA formulation of claim 48 which comprises placing the plasmid DNA formulation in a second formulation containing an amorphous sugar, and lyophilizing the solution.

64(new). The DNA formulation of claim 63 wherein the plasmid DNA encodes a viral or bacterial antigen DNA is selected from the group consisting of influenza virus DNA, hepatitis A virus DNA, hepatitis B virus DNA, hepatitis C virus DNA, human papillomavirus DNA, DNA from *Mycobacterium tuberculosis*, human immunodeficiency virus DNA, varicella zoster virus DNA, herpes virus DNA, measles virus DNA, rotavirus DNA, mumps virus DNA, rubella virus DNA and combinations thereof.

65(new). A stabilized, substantially supercoiled plasmid DNA formulation of claim 52 which comprises placing the plasmid DNA formulation in a second formulation containing an amorphous sugar, and lyophilizing the solution.

66(new). The DNA formulation of claim 65 wherein the plasmid DNA encodes a viral or bacterial antigen DNA is selected from the group consisting of influenza virus DNA, hepatitis A virus DNA, hepatitis B virus DNA, hepatitis C virus DNA, human papillomavirus DNA, DNA from *Mycobacterium tuberculosis*, human immunodeficiency virus DNA, varicella zoster virus DNA, herpes virus DNA, measles virus DNA, rotavirus DNA, mumps virus DNA, rubella virus DNA and combinations thereof.

67(new). A stabilized, substantially supercoiled plasmid DNA formulation of claim 53 which comprises placing the plasmid DNA formulation in a second formulation containing an amorphous sugar, and lyophilizing the solution.

68(new). The DNA formulation of claim 67 wherein the plasmid DNA encodes a viral or bacterial antigen DNA is selected from the group consisting of influenza virus DNA, hepatitis A virus DNA, hepatitis B virus DNA, hepatitis C virus DNA, human papillomavirus DNA, DNA from *Mycobacterium tuberculosis*, human immunodeficiency virus DNA, varicella zoster virus DNA, herpes virus DNA, measles virus DNA, rotavirus DNA, mumps virus DNA, rubella virus DNA and combinations thereof.